Historic Trinity meets Contemporary Complexity

Located opposite the Tower of London, the grand 10 Trinity Square has been restored back to former glory including the integration of a brand new zinc roof comprising approximately 5000 unique individual panels that were designed and developed using Wintech computational modelling techniques. Wintech Façade Engineers were approached to develop a specialist software tool to automate the delivery of the façade design.

This new process significantly reduced the cost and risks associated with the roof’s highly complex geometry and a lack of repetition within the construction, making the whole project commercially viable.

Until now the design of such highly complex constructions with very limited repetition has been a significant constraint on architects due to the resulting cost driven by the number of unique components impacts the supplier and installer. Now specialist project specific parametric software may be developed which changes this paradigm providing much greater levels of architectural freedom without the normal consequences. These techniques were developed as part of a Knowledge Transfer Partnership program with Staffordshire University and form the basis of a parametric engineering department within the Wintech Group.

The brief for architects Woods Bagot required the restoration of the original circulation and geometries of the building including the central rotunda space which was originally designed by Sir Edwin Cooper in the 1920s and lost during the Blitz.

The historic Grade II* listed building was previously used for office space is now being restored and transformed into a luxury Four Seasons Hotel that is set to open at the end of 2016 along with other mixed-use facilities. The redevelopment of the building which was originally built in 1922 has been led by experienced consultants and guided by heritage experts.

10 Trinity Square straddles both the City of London and Tower Hamlets. The building famously featured in scenes of the James Bond film, Skyfall and the complex geometry roof feature is an impressive contributor to the historic skyline.